



**Project Manager  
Soldier Protection and Individual Equipment**

# **The Soldier**

**Our Strength and Purpose**

**Product Manager Soldier Clothing & Individual Equipment**

**T-11 University  
To  
Maneuver Center of Excellence & 1/507<sup>th</sup> PIR  
Fort Benning, GA**

**1 APR 2014**

G. Mark Whiteman  
T-11 Project Lead  
PM SCIE, Personnel Airdrop Systems



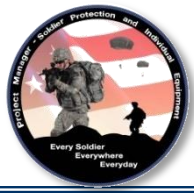
# Agenda



- T-11 Parachute Overview
- Canopy Size: T-11 vs. T-10
- T&E Overview
- Current Status
- Lifecycle Evaluation



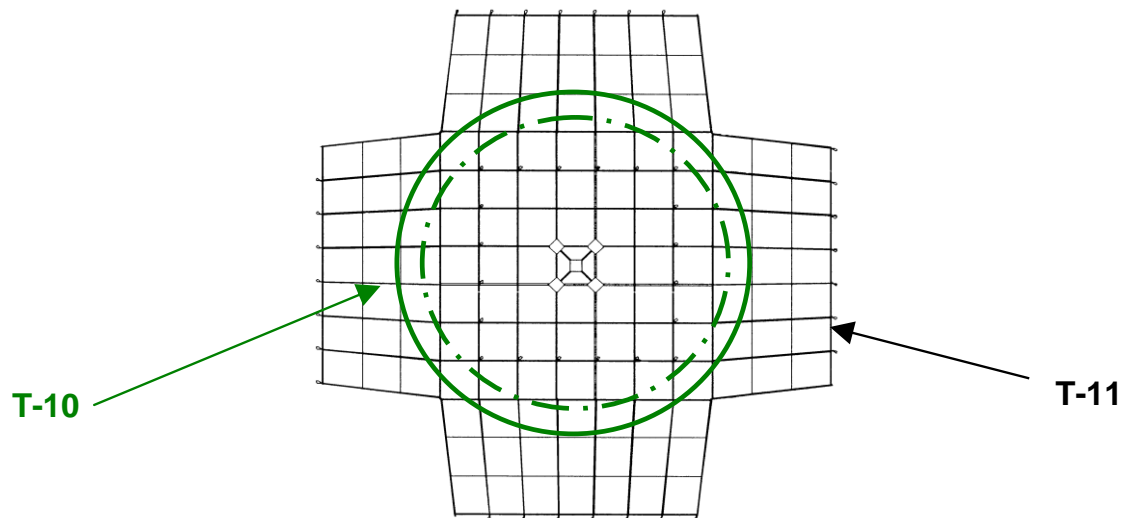
# T-11 Parachute Overview



- T-11 system includes:
  - T-11 Main Canopy Assembly
  - T-11 Reserve Canopy Assembly
  - T-11 Harness Assembly
  - Deployment bag (T-11), pack tray, and universal static line with curved pin
- Capable of supporting 400 lbs Total Jumper Weight
- System weight: 52 lbs
- Limited to operation in winds of 13 knots at surface
- Major End Item - Supply Class: VII
- 16.5 year Age Life per TB 43-0002-43 (4.5yr Shelf Life +12yr Service Life)
- Compatible with all current U.S. military aircraft

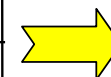


# Canopy Size: T-11 vs. T-10



Physical Characteristics	T-10	T-11	% increase
Main Canopy Surface Area (square ft)	1300	1670	28
Main Canopy Inflated Diameter (ft)	26.9	30.6	14

System	T-10	T-11
Main (lb)	31	37
Reserve (lb)	14	15
Total system (lb)	45	52



7lb increase



# Test & Evaluation Overview



- **Developmental Testing: Aug 01 – Jan 08**
  - Over 229 required live jumps and over 229 reserve jumps (mannequin)
  - Main canopy redesign to slip canopy and CRA change from 3-ring release to Capewell
  
- **Operational Testing: Feb 08 – Oct 08**
  - 3,289 total jumps required to achieve reliability of .9993 at 90% confidence
    - 3,646 OT jumps completed (1,821 with combat equipment)
    - Exceeded reliability - .9994 at 90% confidence
  - Certified for C-130, C-17, CASA-212, and rotary-winged aircraft
    - Completed C-17 Multi-Ship missions: Lower rate of collision and entanglement rate than T-10
  - Certified for high altitude, basic hot, basic cold, and water landing environments
  
- **Safety Confirmation: Mar 09**
  
- **Full Materiel Release: Jun 09**
  
- **CARP Data Published: Jun 09**



# Current Status

- Currently in Full Rate Production
  - Production contracts expire 30 Sep 2014
  - Need to field remaining 2,067 T-11s to 1/507<sup>th</sup> PIR
- Significantly lowered injuries
  - From Jun 2010 – Aug 2013 at Fort Bragg:
    - T-10: of 105,402 jumps, 968 injuries = **9.1 injuries / 1,000 jumps**
    - T-11: of 25,345 jumps, 133 injuries = **5.2 / 1,000 jumps**
- Fielding:
  - ~85% fielded, AAO of 43,706
  - All COMPO 1 fielded
  - Currently fielding and training 421<sup>st</sup> QM, 165<sup>th</sup> QM, and 861<sup>st</sup> QM through FY 14



***Using the T-11 results in 43% fewer injuries than the T-10***

***Dr. Joseph J. Knapik, US Army Institute of Public Health Institute-***

***COMPARISON OF INJURY INCIDENCE BETWEEN THE T-11 ADVANCED TACTICAL PARACHUTE SYSTEM AND THE T-10D PARACHUTE, FORT BRAGG, NORTH CAROLINA, JUNE 2010-NOVEMBER 2013***



# Lifecycle Evaluation

- Evaluating existing 12-yr service life and 16.5-yr age life of static line parachutes
  - Validate robust parachute design, and durability of textiles/hardware, rather than maintain the legacy static line parachute standard
  - Evaluation will take place over several years
    - Based upon air permeability measurements and tensile strength of suspension lines
- Completed baseline RI ARNG, 1/507<sup>th</sup> PIR, 4<sup>th</sup> QM, & 10<sup>th</sup> SFG (A)
  - Making arrangements w/ 5<sup>th</sup> SFG (A)
  - Seeking unit w/ premeditated water jumps
    - Requires unit to track jump conditions and maintenance for 20 main canopies throughout evaluation
    - PM SCIE will perform on-site evaluation of those 20 canopies



# Points Of Contact



## **Program Office (PM-SCIE Personnel Airdrop Team, Fort Belvoir, VA & Natick Soldier Systems Center, MA)**

APM – Airdrop Systems: MAJ Ernesto Perez, [ernesto.perez2.mil@mail.mil](mailto:ernesto.perez2.mil@mail.mil); (703) 805-8528 (w); (571) 732-6549 (c)

Team Leader – Airdrop Systems: Takis Blanas, [panagiotis.blanas.civ@mail.mil](mailto:panagiotis.blanas.civ@mail.mil); (508) 233-6356 (w); (508) 314-3283 (c)

T-11 Project Lead: G. Mark Whiteman, [g.m.whiteman.civ@mail.mil](mailto:g.m.whiteman.civ@mail.mil); (508) 233-4819 (w); (508) 314-4569 (c)

Equipment Specialist: Darrin Fredrickson, [darrin.j.fredrickson.civ@mail.mil](mailto:darrin.j.fredrickson.civ@mail.mil); (508) 233-5232 (w); (508) 314-1892 (c)

Fort Benning Liason: David Countryman, [david.e.countryman.ctr@mail.mil](mailto:david.e.countryman.ctr@mail.mil); (571) 305-3156 (w)